



Information Update

**Manitoba
Agriculture
and Food**



**Guidelines For Estimating
Bison Bull Finishing Costs**

For Weight Range of 490 -1075 lbs

Based on 300 Head

www.gov.mb.ca/agriculture/

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This guide is designed to provide you with planning information and a format for calculating costs of production of a bison bull finishing enterprise. The production costs included in this enterprise budget are not intended as a cost study of the bison industry in Manitoba.

The budget estimates are based on a number of assumptions which are clearly defined in the supporting pages. Input costs are based on recommended practices and/or information obtained from producers. Good management is assumed in that a balanced feeding program is being used, bison are on a herd health program and handling facilities are included.

The guideline can be useful for comparison purposes. Comparison of costs at different levels of production can be made with other farms, the farm over a period of time or comparing the plan with the actual results at the end of the planning period.

The budget may be adjusted to reflect your unique situation by substituting your own figures in the appropriate places. Each bison producer is encouraged to determine their own costs of production based on their own inputs, pasture program and level of management.

Also available, on the Manitoba Agriculture and Food website, is an Excel spreadsheet and it can be downloaded from the following address:
<http://www.gov.mb.ca/agriculture/>

Bison Bull Finishing Cost- Summary

Based on 300 head

A. Operating Costs	<u>Cost/Head</u>	<u>Total Cost</u>	<u>Your Cost</u>
1. Feed Costs			
1.01 Complete Ration	\$107.21	32,163	
1.02 Grass Hay	\$79.80	23,940	
1.03 Salt & Minerals	\$4.06	1,218	
1.04 Pasture Costs	\$91.00	27,300	
Total Feed Costs	\$282.07	\$84,621	
2. Other Operating Costs			
2.01 Feeder Cost	593.00	177,900	
2.02 Straw	3.00	900	
2.03 Veterinary Medicine & Supplies	5.73	1,719	
2.04 Annual Fuel & Repair Costs	10.00	3,000	
2.05 Utilities	6.67	2,001	
2.06 Trucking Costs	39.29		
2.07 Insurance	8.47	2,541	
2.08 Manure Removal	5.00	1,500	
2.09 Barn & Office Supplies	3.33	999	
2.10 Death Loss	7.55	2,265	
Subtotal Operating Costs	964.11	277,446	
2.11 Operating Interest	45.94	13,781	
Total Operating Costs	\$1,010.04	\$291,227	
B. Fixed Costs			
3. Depreciation			
3.01 Buildings	15.17	4,551	
3.02 Machinery & Equipment	16.17	4,851	
4. Investment			
4.01 Buildings	6.07	1,821	
4.02 Machinery & Equipment	5.21	1,563	
Total Fixed Costs	\$42.62	\$12,786	
Total Operating and Fixed Costs	\$1,052.66	\$304,013	
C. Labour	\$30.00	\$9,000	
Total Cost of Production	\$1,082.66	\$313,013	
Breakeven Selling Price	\$/lb		
Operating Costs	\$1.00		
Operating & Fixed	\$1.04		
Total Costs	\$1.07		

Bison Bull Finishing Cost Worksheet

Based on 300 head

Assumptions

1. This budget assumes the weaning and/or purchase weight of bison bull calves to be approximately 490 lbs. Finish weight would be assumed to be 1075 lbs.
2. This budget assumes a shrink (lot to slaughter plant) of 6 %. Shrunk Weight weight = 1011 lbs.
3. Average Daily Gain = 1.65 lbs per day.
4. Time frame from start to finish is approximately 363 days, 90 days on finishing ration and 133 days backgrounding ration and 140 days pasture.
5. Grain ration is prepared (minerals and salt included).
6. This budget is based on a finishing enterprise of 300 bulls.

A. Operating Costs

1. Feed Costs

1.01 Complete Ration

	90	days on ration
x	16.5	lbs/feeder/day
x	\$0.06	/lb
=	\$92.81	/feeder

	90	days on hay
x	8	lbs/feeder/day
x	\$40	/ton
=	14.40	/feeder

= \$107.21 /feeder

Your Cost

Your Cost**1.02 Grass Hay**

	133	days on hay
x	20.0	lbs/feeder/day
=	1.330	tons fed
x	\$60.00	/ton
=	\$79.80	/feeder

1.03 Salt & Minerals

	9	lbs/year
x	\$0.14	\$/lb
=	\$1.26	/feeder

	7	lbs/year
x	\$0.40	\$/lb
=	\$2.80	/feeder

=	\$4.06	/feeder
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1.04 Pasture Costs

	\$0.65	\$/head/day
x	140	days on pasture
=	\$91.00	/feeder

2. Other Operating Costs**2.01 Feeder Bison Cost**

	490	lbs/feeder
x	\$120.00	/cwt
+	100	lbs/cwt
=	\$588.00	/feeder

	150	miles
x	\$3.00	\$/loaded mile
+	90	head load capacity
=	\$5.00	/feeder

=	\$593.00	/feeder
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2.02 Straw

	0.13	tonnes/feeder/year
x	<u>\$24.00</u>	/tonne
=	\$3.00	/feeder

Your Cost**2.03 Veterinary Medicine & Supplies**

Medication

	\$0.55	blackleg
+	\$0.00	vitamin
+	<u>\$3.80</u>	<u>parasite control</u>
=	\$4.35	/feeder

Herd health program

	\$90.00	/hour charge
x	3	hours
+	<u>300</u>	<u>feeders</u>
=	\$0.90	/feeder

Mileage

	\$0.90	/km charge
x	160	kilometres
x	1	visits
+	<u>300</u>	<u>feeders</u>
=	\$0.48	/feeder

Total = \$5.73 /feeder**2.04 Annual Fuel & Repair Costs**

	\$1,000	repairs
+	\$2,000	fuel costs
+	<u>300</u>	<u>feeders</u>
=	\$10.00	/feeder

2.05 Utilities

	\$2,000	cost/year
+	<u>300</u>	<u>feeders</u>
=	\$6.67	/feeder

Your Cost**2.06 Trucking Costs**

	\$3.00	\$/loaded mile
x	550	distance miles
+	42	head load capacity
=	\$39.29	/feeder

2.07 Insurance

	\$159,200	building & equipment investment
x	\$0.60	cost/\$100 capital
+	100	
+	300	feeders
=	\$3.18	/feeder

	\$588	feeder investment
x	\$0.90	cost/\$100 capital
+	100	
=	\$5.29	/feeder

Total = \$8.47 /feeder

2.08 Manure Removal

	\$1,500	annual removal cost
+	300	feeders
=	\$5.00	/feeder

2.09 Barn & Office Supplies

	1,000	total barn expenses
+	300	feeders
=	\$3.33	/feeder

2.10 Death Loss

	\$593.00	feeder cost
+	\$141.04	½ of feed
+	\$21.10	½ other (excluding marketing)
x	1.0	% mortality
=	\$7.55	/feeder

2.11 Operating Interest

	\$588.00	feeder cost
+	\$181.78	½ of feed & other costs
x	6.0	% operating interest
x	363	days on feed
÷	<u>365</u>	<u>365 days per year</u>
=	\$45.94	/feeder

Your Cost

Your Cost**Capital Investment****Handling Facilities**

Land & Landscaping	\$10,000	_____
Waterers	\$6,000	_____
Squeeze, Gates & Scale	\$29,500	_____
Well & Pressure System	\$3,500	_____
Pens (Working & Sorting)	\$42,000	_____
Total Building Cost	\$91,000	_____

Machinery & Equipment

Self Feeder	\$13,200	_____
Hay Feeders & Miscellaneous	\$2,500	_____
Miscellaneous	\$2,500	_____
Tractor & Loader	\$50,000	_____
Total	\$68,200	_____

Total Capital Investment	\$159,200	_____
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B. Fixed Costs**3. Depreciation**

$$\frac{\text{Original Cost} - \text{Salvage Value}}{\text{Useful Life}}$$

3.01 Buildings

	\$91,000	original value	_____
-	\$0	salvage value	_____
÷	20	years useful life	_____
÷	<u>300</u>	<u>feeders</u>	_____
=	\$15.17	/feeder	_____

3.02 Machinery & Equipment

	\$68,200	original value	_____
-	\$10,000	salvage value	_____
÷	12	years useful life	_____
÷	<u>300</u>	<u>feeders</u>	_____
=	\$16.17	/feeder	_____

Your Cost**4. Investment**

$$\frac{\text{Original Cost} + \text{Salvage Value}}{2} \times \text{Investment Rate}$$

4.01 Buildings

	\$91,000	total building value	_____
+	\$0	salvage value	_____
÷	2	average	_____
x	4.00	% investment interest	_____
+	<u>300</u>	<u>feeders</u>	_____
=	\$6.07	/feeder	_____

4.02 Machinery & Equipment

	\$68,200	original value	_____
+	\$10,000	salvage value	_____
=	\$78,200		_____
÷	2	average	_____
x	4.00	% investment interest	_____
+	<u>300</u>	<u>feeders</u>	_____
=	\$5.21	/feeder	_____

C. Labour

	3.0	hours/feeder/year	_____
x	<u>\$10.00</u>	<u>/hour</u>	_____
=	\$30.00	/feeder	_____

For further assistance contact your local Manitoba Agriculture and Food office

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